

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	09/896,778	MINDER ET AL.	
	Examiner JEAN B. FLEURANTIN	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 1 October 2004.
2.  The allowed claim(s) is/are 1,3-16,18-31 and 33.
3.  The drawings filed on 19 October 2001 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 2/16/05
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.



SHAHID ALAM  
PRIMARY EXAMINER

### **DETAILED ACTION**

1. This is in response to Applicant(s) arguments filed on 1 October 2004, in which claims 1-36 remain pending for examination.

#### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-34, drawn to a method for performing database operations, the method comprising the steps of: reading, from a first set of database tables by executing a first database query command string, classified in class 707, subclass 2.
  - II. Claims 35 and 36, drawn to a computer-readable medium having stored thereon a data structure including: a name of a first table that includes data to be processed, classified in class 707, subclass 102.

The inventions are distinct, each from the other because of the following reasons:

Invention listed Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention has separate utility as follow.

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Group I. A method for performing database operations, the method comprising the steps of: reading, from a first set of database tables by executing a first database query command string.

Group II. A computer-readable medium having stored thereon a data structure including: a name of a first table that includes data to be processed.

See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classifications, restriction for examination purposes is proper.

Because these inventions are distinct for the reasons given above and the search for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant(s) are reminded that upon the cancellation of claims to a non-elected invention the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

During a telephone conversation with Mr. Stephen Bongini (Reg. No. 40,917) on February 16, 2005, a provisional election was made without traverse to prosecute the

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invention of Group I, claims 1-34. Affirmation of this election must be made by the applicant in replying to this Office Action. Claims 35 and 36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

#### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Stephen Bongini (Reg. No. 40,917) on February 16, 2005.

The application has been amended as follow:

In the claims,

Claim 5, line 1, change "The method according to claim 2," to -- The method according to claim 1, --.

Claim 7, line 1, change "The method according to claim 2," to -- The method according to claim 1, --.

Claim 18, line 1, change "The computer readable medium according to claim 17," to -- The computer readable medium according to claim 16, --.

Claim 20, line 1, change "The computer readable medium according to claim 17," to -- The computer readable medium according to claim 16, --.

Claim 22, line 1, change "The computer readable medium according to claim 17," to - - The computer readable medium according to claim 16, - -.

Please cancel claims 2, 17, 32, 34, 35 and 36.

Please replace the old version(s) of claims 1, 16, 31 and 33 with the new version(s) of claims 1, 16, 31 and 33 as follows:

Claim 1. A method for performing database operations, the method comprising the steps of:

reading, from a first set of database tables by executing a first database query command string, a first plurality of elements, the first plurality of elements comprising at least one database query language command and at least one database query command argument;

assembling the first plurality of elements that were read from the first set of database tables into a, query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and

executing the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables;

wherein the first set of database tables comprises a first query element database table and a second query element database table, and wherein the step of reading comprises the sub-steps of:

reading, by executing a second database query command string, a name of the second query element database table from the first query element database table; and reading, from the second query element database table by executing a third database query command string, a plurality of arguments to be assembled into the query string.

Claim 16. A machine-readable medium encoded with a program for performing database operations, said program containing instructions for performing the steps of:

reading, from a first set of database tables by executing a first database query command string, a first plurality of elements, the first plurality of elements comprising at least one database query language command and at least one database query language command argument;

assembling the first plurality of element that were read from the first set of database tables into a, query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and

executing the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables;

wherein the first set of database tables comprises a first query element database table and a second query element database table, and wherein the step of reading comprises the sub-steps of:

reading, by executing a second database query command string, a name of the second query element database table from the first query element database table; and

reading, from the second query element database table by executing a third database query command string, a plurality of arguments to be assembled into the query string.

Claim 31. A data processing system comprising:

a storage device for storing a relational database; and

a processor programmed to:

read, from a first set of database tables by executing a first database query command string, a first plurality of elements, the first plurality of elements comprising at least one database query language command argument and at least one database query

assemble the first plurality of elements that were read from the first set of database tables into a query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and

execute the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables;

wherein the processor is further programmed to:

read a second plurality of elements of a database query language query from a third set of database tables;

assemble a data base table command string from the second plurality of elements;

and

execute the data base storage command to modify a target data database table with the result set.

Claim 33. A data processing system comprising:

means for storing one or more data tables;

means for reading, from a first set of database tables by executing a first database query command string, a first plurality of elements, the first plurality of elements comprising at least one database query language command argument and at least one database query command argument;

means for assembling the first plurality of elements that were read from the first set of database tables into a query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and

means for executing the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables;

means for reading a second plurality of elements of a database query language query from a third set of database tables;

means for assembling a data base table command string from the second plurality of elements;

and

means for executing the data base storage command to modify a target data database table with the result set.

## **REASONS FOR ALLOWANCE**

4. With respect to claims 1, 3-16, 18-31 and 33 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

With respect to claims 1 and 16, the claimed features "assembling the first plurality of elements that were read from the first set of database tables into a query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and executing the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables; wherein the first set of database tables comprises a first query element database table and a second query element database table" in conjunction with other elements of the independent claims would not found anticipated or obvious over the prior art made of record. With respect to claim 31, the claimed features "assemble the first plurality of elements that were read from the

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first set of database tables into a query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and execute the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables; wherein the processor is further programmed to read a second plurality of elements of a database query language query from a third set of database tables; assemble a data base table command string from the second plurality of elements" in conjunction with other elements of the independent claims would not found anticipated or obvious over the prior art made of record. With respect to claim 33, the claimed features "means for assembling the first plurality of elements that were read from the first set of database tables into a query string comprising a second database query command string to be executed by a database search engine on a second set of database tables; and means for executing the query string as a second database query command string on the database engine to retrieve a results set from the second set of database tables; means for reading a second plurality of elements of a database query language query from a third set of database tables" in conjunction with other elements of the independent claims would not found anticipated or obvious over the prior art made of record.

The dependent claims, being definite, further limiting, and fully enabled by the specification are also allowed.

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The closest prior art, Beavin al., U.S. Patent Number 5,940,819 relates generally to database management systems and, more particularly, to efficient evaluation of SQL statements processed in relational database management systems. Suganama U.S. Patent Number 6,704,748 relates to a database search system but fail to teach the above limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### CONTACT INFORMATION

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6606.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean Bolte Fleurantin

18 February 2005



SHAHID ALAM  
PRIMARY EXAMINER